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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Joseph Tucker, et al.

Serial No.: 10/709,653

Filed: May 20, 2004

For: Self-Aligning Insert for Drill Bits



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Art Unit No.: 3672


Examiner:

Docket No.: 78.1182

August 25, 2005

U.S. Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Dear Sir:

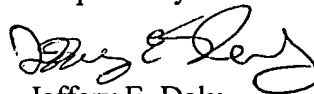
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Enclosed in connection with the above-captioned application are:

1. Transmittal Letter
2. Information Disclosure Statement
3. PTO/SB/08A *Information Disclosure Statement By Applicant*
4. Copies of Foreign Patents
5. Return Receipt Card

No fee is believed to be due at this time; however, the Commissioner is hereby authorized to charge any additional fees that may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account No. 180584.

Respectfully submitted,



Jeffery E. Daly  
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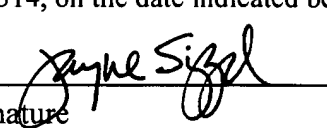
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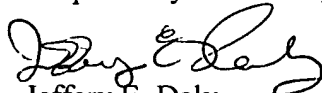
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INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 and 1.98

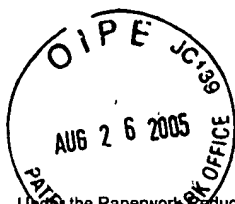
In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the reference listed on the attached Form PTO/SB/08A be considered by the Examiner and made of record. Copies of the listed non-U.S. references are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. § 1.97(g), this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined 37 C.F.R. § 1.56(b) exists. Furthermore, pursuant to 37 C.F.R. § 1.97(h), the filing of this statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

Respectfully submitted,

  
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PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 14

**Complete if Known**

Application Number	10/709,653
Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
Art Unit	3672
Examiner Name	
Attorney Docket Number	78.1182

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 4150476	04-24-1979	Kita	
		US- 4077734	03-07-1978	Kita	
		US- 3603414	09-07-1971	Stebley	
		US- 4289211	09-15-1981	Lumen	
		US- 4176725	12-04-1979	Shields	
		US- 2121202	06-21-1938	Killgore	
		US- 2626128	01-20-1953	Boice	
		US- 3134447	05-26-1964	McElya et al.	
		US- 3388757	06-18-1968	Fittinger	
		US- 3401759	09-17-1968	White	
		US- 3442342	05-06-1969	McElya et al.	
		US- 3495668	02-17-1970	Schumacher Jr	
		US- 3599737	08-17-1971	Fischer	
		US- 3628616	12-21-1971	Neilson	
		US- 3726350	04-10-1973	Pessier	
		US- 3727705	04-17-1973	Newman	
		US- 3952815	04-27-1976	Dysart	
		US- 3970158	07-20-1976	Black et al.	
		US- 4006788	02-08-1977	Garner	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		EP0501258 A1	09-02-1992	Hughes Tool Co		
		EP0500514 A1	08-26-1992	Sandvik Aktiebo		
		EP0476352 A1	03-25-1992	Hughes Tool Co		
		EP0467870 A1	01-22-1992	Smith Inter		
		EP0453428 A1	10-23-1991	Sandvik Aktiebo		
		EP0449415 A2	02-21-1991	Camco Internat		

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet 2 of 14**Complete if Known**

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 4058177	11-15-1977	Langford, Jr et al.	
		US- 4067406	01-10-1978	Garner et al.	
		US- 4086973	05-02-1978	Keller et al.	
		US- 4108260	08-22-1978	Bozarth	
		US- 4108692	08-22-1978	Quinlan	
		US- 4140189	02-20-1979	Garner	
		US- 4148368	04-10-1979	Evans	
		US- 4150728	04-24-1979	Garner et al	
		US- 4168923	09-25-1979	Vezirian	
		US- 4181187	01-01-1980	Lumen	
		US- 4187922	02-12-1980	Phelps	
		US- 4199035	04-22-1980	Thompson	
		US- 4203496	05-20-1980	Baker, III et al.	
		US- 4211508	07-08-1980	Dill et al.	
		US- 4231438	11-04-1980	Garner et al.	
		US- 4254840	03-10-1981	Shay, Jr	
		US- 4303137	12-01-1981	Fischer	
		US- 4334586	06-15-1982	Schumacher	
		US- 4343371	08-10-1982	Baker, III et al.	

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		EP0142941 A1	05-29-1985	Smith Internat		
		EP0955445 A2	11-10-1999	GE		
		EP0916804 A1	05-19-1999	GE		
		EP0890705 A3	01-13-1999	Baker Hughes		
		EP0852283 A3	07-08-1998	GE		
		EP0823535 A2	08-05-1997	Baker Hughes		

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		US- 4343372	08-10-1982	Kinzer	
		US- 4359335	11-16-1982	Garner	
		US- 4372404	02-08-1983	Drake	
		US- 4386669	06-07-1983	Evans	
		US- 4393948	07-19-1983	Fernandez	
		US- 4398952	08-16-1983	Drake	
		US- 4406337	09-27-1983	Dill	
		US- 4420050	12-13-1983	Jones	
		US- 4427081	01-24-1984	Crawford	
		US- 4441566	04-10-1984	Pessier et al.	
		US- 4444281	04-24-1984	Schumacher Jr et al.	
		US- 4481016	11-06-1984	Campbell et al.	
		US- 4531595	07-30-1985	Housman	
		US- 4554130	11-19-1985	Ecer	
		US- 4593776	06-10-1986	Salesky et al.	
		US- 4595067	06-17-1986	Drake	
		US- 4597456	07-01-1986	Ecer	
		US- 4641718	02-10-1987	Bengtsson	
		US- 4657093	04-14-1987	Schumacher	

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		EP0802301 A2	10-22-1997	Baker Hughes		
		EP0747566 A1	12-11-1996	Baker Hughes		
		EP0723066 A3	07-24-1996	Baker Hughes		
		EP0527506 A3	02-17-1993	Smith Inter		
		EP0511547 A2	11-04-1992	Smith Inter		
		GB2279095 A	12-21-1994	Smith Inter		

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		US- 4679640	07-14-1987	Crawford	
		US- 4683781	08-04-1987	Kar et al.	
		US- 4694918	09-22-1987	Hall	
		US- 4708752	11-24-1987	Kar	
		US- 4716977	01-05-1988	Huffstutler	
		US- 4722405	02-02-1988	Langford Jr.	
		US- 4764255	08-16-1988	Fischer et al.	
		US- 4781770	11-01-1988	Kar	
		US- 4811801	03-14-1989	Salesky et al.	
		US- 4832139	05-23-1989	Minikus et al.	
		US- 4867015	09-19-1989	Kane et al.	
		US- 4869329	09-26-1989	Kar et al.	
		US- 4887493	12-19-1989	Drake	
		US- 4940099	07-10-1990	Deane et al.	
		US- 4953641	09-04-1990	Pessier	
		US- 4966627	10-30-1990	Keshavan et al.	
		US- 4969378	11-13-1990	Lu et al.	
		US- 4984643	01-15-1991	Isbell et al.	
		US- 5027913	07-02-1991	Nguyen	

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		GB2274129 A	07-13-1994	Smith Inter		
		GB2273726 A	06-29-1994	Baker Hughes		
		GB2273301 A	06-15-1994	Smith Inter		
		GB2270526 A	03-16-1994	Smith Inter		
		GB2253642 A	09-16-1992	Dresser Indus		
		GB2158101 A	11-06-1985	Smith Inter		

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		US- 5045092	09-03-1991	Keshavan	
		US- 5074367	12-24-1991	Estes	
		US- 5119714	06-09-1992	Scott et al.	
		US- 5145016	09-08-1992	Estes	
		US- 5158148	10-27-1992	Keshavan	
		US- 5159857	11-03-1992	Jurewicz	
		US- 5172777	12-22-1992	Siracki et al.	
		US- 5172779	12-22-1992	Siracki et al.	
		US- 5173090	12-22-1992	Scott et al.	
		US- 5197555	03-30-1993	Estes	
		US- 5201376	04-13-1993	Williams	
		US- 5217081	06-08-1993	Waldenstrom et al	
		US- 5248006	09-28-1993	Scott et al	
		US- 5273125	12-28-1993	Jurewicz	
		US- 5279374	01-18-1994	Sievers et al.	
		US- 5279375	01-18-1994	Tibbitts et al.	
		US- 5281260	01-25-1994	Kumar et al.	
		US- 5282512	02-01-1994	Besson et al.	
		US- 5287936	02-22-1994	Grimes et al.	

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		EP1190791 A2	03-27-2002	Camco Inter		
		EP1182325 A1	02-27-2002	Schlumberger		
		GB2327962 A	02-10-1999	Smith Inter		
		GB2323613 A	09-30-1998	Baker Hughes		
		GB2316112 A	02-18-1998	Baker Hughes		

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**Complete if Known**

Application Number	10/709,653
Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
Art Unit	3672
Examiner Name	
Attorney Docket Number	78.1182

Sheet **6** of **14****U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 5291807	03-08-1994	Vanderford et al.	
		US- 5304342	04-19-1994	Hall, Jr. et al.	
		US- 5305840	04-26-1994	Liang, et al.	
		US- 5322138	06-21-1994	Siracki	
		US- 5323865	06-28-1994	Isbell et al.	
		US- 5335738	08-09-1994	Waldenstrom et al.	
		US- 5341890	08-30-1994	Cawthorne, et al.	
		US- 5346026	09-13-1994	Pessier et al.	
		US- 5348108	09-20-1994	Scott et al.	
		US- 5348770	09-20-1994	Sievers et al.	
		US- 5351768	10-04-1994	Scott et al.	
		US- 5351770	10-04-1994	Cawthorne et al.	
		US- 5353885	10-11-1994	Hooper et al.	
		US- 5355750	10-18-1994	Scott et al.	
		US- 5370195	12-06-1994	Keshavan et al	
		US- 5372210	12-13-1994	Harrell	
		US- 5377773	01-03-1995	Tibbitts	
		US- 5379853	01-10-1995	Lockwood et al.	
		US- 5379854	01-10-1995	Dennis	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)				
		GB2316111 A	02-18-1998	Baker Hughes		
		GB2315777 A	02-11-1998	Smith Inter		
		GB2309242 A	07-23-1997	Dresser Ind		
		GB2307918 A	06-11-1997	Smith Inter		
		GB2306989 A	05-14-1997	Baker Hughes		
		GB2305195 A	04-02-1997	Baker Hughes		

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Application Number 10/709,653

Filing Date May 20, 2004

First Named Inventor Tucker, et al.

Art Unit 3672

Examiner Name

Attorney Docket Number 78.1182

**U. S. PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 5394952	03-07-1995	Johns et al.	
		US- 5407022	04-18-1995	Scott et al.	
		US- 5415243	05-16-1995	Lyon et al.	
		US- 5415244	05-16-1995	Portwood	
		US- 5421423	06-06-1995	Huffstutler	
		US- 5421424	06-06-1995	Portwood et al.	
		US- 5429200	07-04-1995	Blackman et al	
		US- 5429201	07-04-1995	Saxman	
		US- 5454437	10-03-1995	Estes	
		US- 5456328	10-10-1995	Saxman	
		US- 5479997	01-02-1996	Scott et al.	
		US- 5494123	02-27-1996	Nguyen	
		US- 5496638	03-05-1996	Waldenstrom et al.	
		US- 5499688	03-19-1996	Dennis	
		US- 5524719	06-11-1996	Dennis	
		US- 5535838	07-16-1996	Keshavan et al.	
		US- 5542485	08-06-1996	Pessier et al.	
		US- 5544713	08-13-1996	Dennis	
		US- 5566779	10-22-1996	Dennis	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		GB2281330 A	03-01-1995	Smith Inter		
		GB2335155 A	09-15-1999	Smith Inter		
		GB2334984 A	09-08-1999	Smith Inter		
		GB2334278 A	08-18-1999	Smith Inter		
		GB2333541 A	07-28-1999	Smith Inter		
		GB2330852 A	05-05-1999	Smith Inter		

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**Complete if Known**

Application Number	10/709,653
Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
Art Unit	3672
Examiner Name	
Attorney Docket Number	78.1182

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 5588497	12-31-1996	Thorburn	
		US- 5590727	01-07-1997	Tank et al.	
		US- 5592995	01-14-1997	Scott et al.	
		US- 5593474	01-14-1997	Keshavan et al.	
		US- 5624068	04-29-1997	Waldenstrom et al.	
		US- 5630479	05-20-1997	Dennis	
		US- 5636700	06-10-1997	Shamburger, Jr.	
		US- 5637037	06-10-1997	Bergquist	
		US- 5647449	07-15-1997	Dennis	
		US- 5655612	08-12-1997	Grimes et al.	
		US- 5667903	09-16-1997	Boyce	
		US- 5671817	09-30-1997	Smith et al.	
		US- 5678645	10-21-1997	Tibbitts et al.	
		US- 5695018	12-09-1997	Pessier et al.	
		US- 5695019	12-09-1997	Shamburger, Jr.	
		US- 5697461	12-16-1997	Newton et al.	
		US- 5697462	12-16-1997	Grimes et al.	
		US- 5706906	01-13-1998	Jurewicz et al.	
		US- 5709278	01-20-1998	Crawford	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		GB2330851 A	05-05-1999	Smith Inter		
		GB2330850 A	05-05-1999	Smith Inter		
		GB2330605 A	04-28-1999	Smith Inter		
		GB2328966 A	03-10-1999	Smith Inter		
		GB2328965 A	03-10-1999	Smith Inter		
		GB2362406 A	11-21-2001	Smith Inter		

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Application Number 10/709,653

Filing Date May 20, 2004

First Named Inventor Tucker, et al.

Art Unit 3672

Examiner Name

Attorney Docket Number 78.1182

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 5709279	01-20-1998	Dennis	
		US- 5718948	02-17-1998	Ederyd et al.	
		US- 5722497	03-03-1998	Gum et al.	
		US- 5743346	04-28-1998	Flood et al.	
		US- 5746280	05-05-1998	Scott et al.	
		US- 5746281	05-05-1998	Hulkkonen	
		US- 5752573	05-19-1998	Scott et al.	
		US- 5755298	05-26-1998	Langford, Jr. et al.	
		US- 5755299	05-26-1998	Langford, Jr. et al.	
		US- 5755301	05-26-1998	Love et al.	
		US- 5758733	06-02-1998	Scott et al.	
		US- 5766394	06-16-1998	Anderson et al.	
		US- 5791423	08-11-1998	Overstreet et al.	
		US- 5813485	09-29-1998	Portwood	
		US- 5816347	10-06-1998	Dennis et al.	
		US- 5819861	10-13-1998	Scott et al.	
		US- 5829541	11-03-1998	Flood et al.	
		US- 5833020	11-10-1998	Portwood et al.	
		US- 5833021	11-10-1998	Mensa-Wilmot et al.	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		GB2357532 A	06-27-2001	Smith Inter		
		GB2348901 A	10-18-2000	Smith Inter		
		GB2348900 A	10-18-2000	Smith Inter		
		GB2348899 A	10-18-2000	Baker Hughes		
		GB2347957 A	09-20-2000	Smith Inter		
		GB2345707 A	07-19-2000	Baker Hughes		

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Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
Art Unit	3672
Examiner Name	
Attorney Docket Number	78.1182

Sheet 10 of 14

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		US- 5837071	11-17-1998	Andersson et al.	
		US- 5839526	11-24-1998	Cisneros et al.	
		US- 5848657	12-15-1998	Flood et al.	
		US- 5855247	01-05-1999	Scott et al.	
		US- 5880382	03-09-1999	Fang et al.	
		US- 5881828	03-16-1999	Fischer et al.	
		US- 5881829	03-16-1999	Dimond et al.	
		US- 5890550	04-06-1999	Swadi et al.	
		US- 5890552	04-06-1999	Scott et al.	
		US- 5906245	05-25-1999	Tibbitts et al.	
		US- 5915486	06-29-1999	Portwood et al.	
		US- 5921330	07-13-1999	Sue et al.	
		US- 5921333	07-13-1999	Hewitt	
		US- 5924501	07-20-1999	Tibbitts	
		US- 5944129	08-31-1999	Jensen	
		US- 5954147	09-21-1999	Overstreet et al.	
		US- 5967245	10-19-1999	Garcia et al.	
		US- 5979575	11-09-1999	Overstreet et al.	
		US- 5984007	11-16-1999	Yuan et al.	

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		GB2345503 A	07-12-2000	Smith Inter		
		GB2344840 A	06-21-2000	Smith Inter		
		GB2344839 A	06-21-2000	Smith Inter		
		WO99/36658	07-22-1999	Dresser Ind		
		WO99/36215	07-22-1999	Dresser Ind		
		WO98/59148	12-30-1998	Baker Hughes		

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Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
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		US- 5992546	11-30-1999	Heinrich et al.	
		US- 5996713	12-07-1999	Pessier et al.	
		US- 5996714	12-07-1999	Massa et al.	
		US- 6053263	04-25-2000	Meiners	
		US- 6059054	05-09-2000	Portwood et al.	
		US- 6063502	05-16-2000	Sue et al.	
		US- 6065552	05-23-2000	Scott et al.	
		US- 6102140	08-15-2000	Boyce et al.	
		US- 6102143	08-15-2000	Snyder et al.	
		US- 6105694	08-22-2000	Scott	
		US- 6106957	08-22-2000	Fang	
		US- 6148938	11-21-2000	Beaton	
		US- 6170583 B1	01-09-2001	Boyce	
		US- 6173798 B1	01-16-2001	Bryant et al.	
		US- 6199645 B1	03-13-2001	Anderson et al.	
		US- 6220376 B1	04-24-2001	Lundell	
		US- 6221479 B1	04-24-2001	Waldenstrom et al.	
		US- 6221493 B1	04-24-2001	Reineck et al.	
		US- 6227318 B1	05-08-2001	Siracki	

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		WO97/32805	10-16-1997	Smith Inter		
		WO97/38204	10-16-1997	Smith Inter		
		WO97/35091	09-25-1997	Dresser Ind		
		WO93/25795	12-23-1993	Baker Hughes		
		WO00/00655	01-06-2000	Sandvik AB		
		GB2396367 A	06-23-2004	Smith Inter		

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**Complete if Known**

Application Number	10/709,653
Filing Date	May 20, 2004
First Named Inventor	Tucker, et al.
Art Unit	3672
Examiner Name	
Attorney Docket Number	78.1182

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 6241034 B1	06-05-2001	Steinke et al.	
		US- 6241035 B1	06-05-2001	Portwood	
		US- 6244364 B1	06-12-2001	Cariveau et al.	
		US- 6260639 B1	07-17-2001	Yong et al.	
		US- 6267797 B1	07-31-2001	Ostlund et al.	
		US- 6290008 B1	09-18-2001	Portwood et al.	
		US- 6294129 B1	09-25-2001	Waldenstrom	
		US- 6299992 B1	10-09-2001	Lindskog et al.	
		US- 6315065 B1	11-13-2001	Yong et al.	
		US- 6326093 B1	12-04-2001	Lindholm et al.	
		US- 6330924 B1	12-18-2001	Hall	
		US- 6345673 B1	02-12-2002	Siracki	
		US- 6371225 B1	04-16-2002	Overstreet et al.	
		US- 6394199 B1	05-28-2002	Skyles et al.	
		US- 6419034 B1	07-16-2002	Belnap et al.	
		US- 6443246 B1	09-03-2002	Pessier et al.	
		US- 6443248 B1	09-03-2002	Yong et al.	
		US- 6454027 B1	09-24-2002	Fang et al.	
		US- 6460636 B1	10-08-2002	Yong et al.	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)				

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 6460637 B1	10-08-2002	Siracki et al.	
		US- 6484826 B1	11-26-2002	Anderson et al.	
		US- 6530441 B1	03-11-2003	Singh et al.	
		US- 6561293 B1	05-13-2003	Minikus et al.	
		US- 6571889 B2	06-03-2003	Griffo et al.	
		US- 6640913 B2	11-04-2003	Lockstedt et al.	
		US- 6651757 B2	11-25-2003	Belnap et al.	
		US- 6719074 B2	04-13-2004	Tsuda et al.	
		US- 6739417 B2	05-25-2004	Smith et al.	
		US- 6782959 B2	08-31-2004	Minikus et al.	
		US- 2001/0008190 A1	07-19-2001	Scott et al.	
		US- 2001/0025728 A1	10-04-2001	Minikus et al.	
		US- 2002/0000336 A1	01-03-2002	Claesson et al.	
		US- 2002/0007972 A1	01-24-2002	Yong et al.	
		US- 2002/0029909 A1	03-14-2002	Griffo et al.	
		US- 2002/0070053 A1	06-13-2002	Siracki	
		US- 2002/0084112 A1	07-04-2002	Hall et al.	
		US- 2002/0100620 A1	08-01-2002	Singh et al.	
		US- 2002/0148326 A1	10-17-2002	Akerman et al.	

FOREIGN PATENT DOCUMENTS						
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		Number-Kind Code <sup>2</sup> (if known)			
		US- 2003/0051924 A1	03-20-2003	Tsuda et al.	
		US- 2003/0079917 A1	05-01-2003	Klompenburg et al.	
		US- 2003/0188896 A1	10-09-2003	Minikus et al.	
		US- 2003/0226693 A1	12-11-2003	Liang et al.	
		US- 2004/0003946 A1	01-08-2004	Yong et al.	
		US- 2004/0040750 A1	03-04-2004	Griffo et al.	
		US- 2004/0045743 A1	03-11-2004	Lockstedt et al.	
		US- 2004/0084223 A1	05-06-2004	Richman	
		US- 2004/0094334 A1	05-20-2004	Singh	
		US- 2004/0112650 A1	06-17-2004	Moseley	
		US- 2004/0140133 A1	07-22-2004	Liang	
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